IOS Development Training Curriculum

STRUCTURE

IOS Development using Swift Training Curriculum

"Our IOS Development Training makes sure that you are way ahead of your colleagues. So, hurry up and enroll today to work smartly."

Course Objectives:

- Understand the core construct of newly introduced Swift Programming Language
- Leverage Swift's new language features like optional and closures
- Create Extensions to extend Swift's Out of Box functionality
- Create Generics to increase our code's flexibility and power
- Understand Swift's new initializer pattern
- Understand iCloud & Core Data Framework
- Work with Auto layouts to build applications for all screen sizes
- Work on a real-life Project, implementing all the features learnt during the class to derive Business Insights.

Course Description:

The iOS App Development using Swift training course will introduce the participants to the exciting world of iOS application development. Swift is a brand-new programming language for iOS and OS X apps which adopts safe programming patterns and adds modern features to make programming easier, more flexible, and more fun. This course will enable participants to design and develop applications for iPhones & iPads.

Mobile Applications are in great use today and there is even more demand for Mobile Developers. iOS App Store is more like a market where you can sell brilliant applications you developed in iOS Technology. Apple encourages practically anyone to try their hand at iOS development. Just $99 per year gives you access to Apple's developer program; the development tools are freely available and Croma Campus's "iOS App Development using Swift" training enables developers to build effective iOS applications.

Who should go for this iOS App Development Training?

The course is designed for professionals who want to learn iOS App Development with Apple's Brand-New Language 'Swift'. The following professionals can go for this course:

- Software Developers and Architects
- Mobile App Developers
- Project Managers
- Testing Professionals
- Mainframe Professionals
- Graduates aiming to build a career in iOS App Development

All the best for a new beginning and successful career ahead!

Course Content:

Module 1: Understanding Swift

In this module, we will learn the basic building blocks of Swift technology. You will learn all basics principles of Swift Programming language like Loops, Conditions and Structures.

- Introduction to Swift
- Introduction to XCode IDE
- Structure of Swift program
- Compiling and building a Hello world
- Swift Playground
- Basic Syntax
- Variables and data types
- Structs and Classes

Module 2: Getting Started with Swift

In this module, we will take you through different collections types available in Swift. You will learn to create Classes and Enums along with Protocols & Generics. You will also learn newly introduces Tuples, Closures and Subscripts.

- Working with collections
- Protocols and Extensions
- Generics
- Tuple
- Functions
- Subscripts
- Closures
- Automatic Reference Counting

Module 3: iOS Development Basics

In this module, we will take you through XCode and iOS SDK Installation. You will learn to create basic iOS Application. You will also learn core pillars of iOS Application Development. We will learn to use iOS simulator to test iOS Applications.

- Installing XCode and iOS SDK
- Understanding XCode
- Creating a simple iOS app
- Project templates
- Introduction to pillars of iOS app development-Tools-XCode
- iOS Simulator
- Instruments
- Language- Swift
- Design patterns
- Frameworks
- Design-Correct UI
- Apple HIG

- Testing
- Provisioning
- Signing
- Submitting
- Using iOS Simulator
- MVC pattern in iOS app development

Module 4: Storyboard Controllers and Layouts

In this module, we will take you through iOS Application Lifecycle. You will learn different View Controllers available in iOS SDK to create different types of Applications. This module will enable you to debug any iOS application to analyze in-depth functionality. You will learn Auto Layouts to create Applications for different screen sizes. We will also teach you to effectively use iOS Storyboards to create multiple page iOS applications.

- Lifecycle of iOS Application
- Understanding Delegation
- iOS View Controllers
- Creating UI
- Introduction to Layout and Views
- Designing responsive interfaces with Auto layout
- Create a sample UI
- Walkthrough of controllers
- Debugging iOS application

Module 5: TableView, CollectionView & Various View Controllers

This module will concentrate on TableViews & CollectionView which are considered to be heavily used views in any iOS Application. You will learn how to create TableView & CollectionViews and perform various operations on it.

- Introduction to Table View
- Creating a basic table view and data source
- Loading data into TableView
- Reusing table view cells
- Customizing table views
- UI CollectionView
- UI Refresh Control
- Introduction to multiple-view applications
- Using navigation controller
- Introduction to a master-detail application
- Creating a tab-bar-driven application
- UI PageViewController

Module 6: Universal App, Size Classes & Camera

In this module, you will learn to create applications which work both on iPhone & iPad. You will learn to use Size Classes to support multiple screens. This module will also teach you to capture images from Camera or Gallery.

- UISplitViewController
- Master-detail application
- Using Size Classes for Adaptive Layout
- Using Camera & Gallery to Capture Images

Module 7: Animation, Location, Maps & Social Sharing

In this module, you will learn about iOS Animation framework while working on Core Animation, UIKit Dynamics. You will also learn to use Facebook Pop Animation framework. You will also learn to capture device location and displaying locations on Map. Last but not the least this module will also teach you to share contents right from your iOS Application using UIActivityViewController.

- Animations - Core Animation
- UIKit Dynamics
- Facebook Pop Animation
- Working with Maps- MKMapItem and MKPlacemark
- CLLocationManager
- MKMapView
- UIActivityViewController to perform Social Sharing

Module 8: JSON Handling, Network Operation & Image Caching

Learning Objectives: In this module, you will learn to create iOS Applications which can perform network operations using popular Alamofire open source library. You will also learn to handle JSON Data using SwiftJSON Library & Image caching using HanekeSwift.

- Networking with Alamofire
- SwiftyJSON & HanekeSwift
- Introduction to networking in iOS application
- Adding/Managing frameworks using Carthage
- JSON Handling using SwiftJSON
- Performing Networking using Alamofire
- Downloading & Caching images using HanekeSwift

Module 9: Data Persistence and Storage

This module will enable you to work with Core Data database framework. You will perform various CRUD operations on Data. You will also learn to use different storage options available in iOS SDK.

- iOS data persistence
- Using NS User Defaults to store and read information
- Property Lists-Working with Core data
- Introduction to Core Data
- Creating models with entities
- Saving models
- Fetching model
- Edit and remove models

- Sample application implementing Core data

Module 10: CloudKit, Parse and Submitting Apps to App Store

This module concentrates on teaching you CloudKit and Parse to save and retrieve data to/from Cloud. We will also take you through all the steps involved in submitting an application to Apple App Store.

- Implementing CloudKit Storage
- Interact with Parse backend
- Localizing Application
- Submitting an App to Apple App Store

Module 11: Placement Guide

This module concentrates on improving your soft skills, once you have acquired all technical skills related to the IOS. It will include mock interview drives, interview tips, certification roadmap, etc.

- What is an Interview?
- Tips to clear an Interview
- Common Interview questions and answers
- IOS Development Interview Questions and Answers
- Resume Building Guide
- Career roadmap and certifications
- Attempt for related Global Certification Exam, if any
- Start applying for Jobs